Remarks

Claims 7, 10, and 12-35 are pending in the application. Claims 12-35 stand withdrawn from consideration pursuant to a restriction requirement. Claims 1-6, 8, 9 and 11 are cancelled herein, without prejudice.

The title has been amended to more particularly point out the subject matter of the invention.

The specification has been amended to correct an error at page 20, lines 28-29. The indicated nucleotide sequence should be identified as "SEQ ID NO:12", not SEQ ID NO:9. The Sequence Listing has been amended to reference the nucleotide sequence at page 20, lines 28-29 as new SEQ ID NO:12.

Claims 7 and 10 have been amended to reflect that the peptides recited in these claims consist of "amino acids", as defined in the specification at page 3, lines 24-27. The reference in these claims to sequence identifiers (SEQ ID NOs) should not be construed as limiting the recited amino acid sequences to sequences of L-amino acids, as the definition of "amino acid" in the specification by its terms extends to L- and D-amino acids.

Response to Section 112, 2nd Paragraph Rejection

Claims 1-11 were rejected for alleged indefiniteness. Specific grounds for rejection were given for claims 1, 8, 9 an 11. Without acquiescing in the rejection, claims 1-6, 8, 9 and 11 have been cancelled. The rejection is therefore moot as to these claims.

Claims 2-7 and 10 were rejected for "depending from an indefinite claim". It is noted that claims 7 and 10 do not depend from any of the allegedly indefinite claims 1-6, 8, 9 or 11. Thus, claims 7 and 10 are believed free of the indefiniteness rejection. Reconsideration and withdrawal of the Section 112, 2nd paragraph rejection, as it relates to claims 7 and 10, is respectfully requested.

Response to Section 112, 1st Paragraph Rejections

Claims 1-8 have been rejected for allegedly failing to comply with the written description requirement of Section 112. Claim 7 defines a pharmaceutical composition containing the peptide of SEQ ID NO:4. Examiner admits at page 5 of the Detailed Action that the claims as

they relate to this peptide satisfy the written description requirement. Thus, claim 7 is believed free of the rejection. Reconsideration and withdrawal of the Section 112, 1st paragraph written description rejection, as applied to claim 7, is respectfully requested.

Claims 1-11 have been rejected for allegedly failing to comply with the enablement requirement of Section 112. Claims 7 and 10 define pharmaceutical compositions of the SEQ ID NO:7 (SMRER) and SEQ ID NO:9 (RER), respectively. Examiner admits at page 7 of the Detailed Action that the specification is enabling as it relates to the SMRER and RER peptides. Thus, claims 7 and 10 are believed free of the rejection. Reconsideration and withdrawal of the Section 112, 1st enablement rejection, as applied to claims 7 and 10, is respectfully requested.

The Section 112, 1st paragraphs, rejection of claims 1-6, 8, 9 and 11 is moot in view of the cancellation of those claims.

Response to Section 102 Rejection

Claim 7 and 9-11 have been rejected as allegedly anticipated by Saitoh *et al.*, WO 94/09808 ("Saitoh"). Without acquiescing in the rejection, claims 9 and 11 have been cancelled. The rejection is therefore moot as to claims 9 and 11. Reconsideration of the Section 102 rejection is requested, as it relates to claims 7 and 10.

Claim 7, directed to a pharmaceutical composition comprising the SMRER peptide, is not anticipated by Saitoh. The Detailed Action, page 19, refers to four peptides as allegedly being disclosed by Saitoh. SMRER is not among the peptides listed by Examiner. The reason is apparent. There is no reference anywhere in Saitoh to the peptide SMRER. Saitoh does not teach the peptide SMRER, and can not therefore anticipate claim 7.

Claim 10 is not anticipated by Saitoh. Although Saitoh includes a reference to the tripeptide RER (page 18, line 7), Saitoh teaches away from any pharmaceutical or therapeutic activity of RER. In this connection attention is drawn to the minus sign in parenthesis in the final column of the table at the top of page 18, for the row relating to RER. The minus sign indicates that RER was inactive in the assay. Further, Saitoh states at page 18, lines 24 to 26 "...we tested...M3 (RER) and found no activity." Thus, Saitoh teaches away from any pharmaceutical composition containing RER, as the reference states that the compound has no pharmaceutical activity. The inventors in the present application have found otherwise.

Saitoh also includes the following statement at page 18, lines 28 to 30:

> "Thus, we have narrowed down the active site to the 5 amino acid sequence RERMS (SEQ ID No: 1) (residues 328 through 332 of Kang APP sequence)."

Saitoh also states at, page 40, lines 7 to 10:

> "...we observed that the 5 amino acid sequence RERMS (SEQ ID No: 1)...is essential for the binding activity."

From these remarks, Saitoh teaches a minimum sequence of the five amino acid sequence RERMS for biological activity. Contrary to the teachings of Saitoh, the present inventors have found that the tripeptide RER is a useful pharmaceutical.

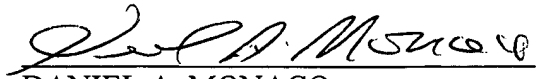
Examiner refers to pages 48 to 54 (examples XXVI to XXVIII) of Saitoh. Examiner appears to believe that these examples describe the injection of the pentapeptide RERMS, the tripeptide RER and two 17-mer-polypeptides in saline solution directly into rat brains. However, examples XXVI to XXVIII of Saitoh are concerned solely with the two 17-mer-polypeptides and have nothing whatever to do with RER or, for that matter, SMRER. Neither of claims 7 or 10 are therefore believed to be either anticipated by or obvious over the teaching of the Saitoh document because Saitoh makes no reference whatsoever to SMRER, and teaches away from any biological, therapeutic or pharmaceutical activity of RER.

Conclusion:

Claims 7 and 10, directed to pharmaceutical compositions, are believed to be in condition for allowance. An early action toward that end is earnestly solicited. Claims 14, 18, 22, 26, 30, 34, depend from either claim 7 or 10, and recite treatment methods using the claim 7 or 8 compositions. Pursuant to MPEP 809.04, claims 14, 18, 22, 26, 30 and 34 should be rejoined with claims 7 and 10, upon allowance of the latter.

Respectfully submitted

RADMILA MILEUSNIC, *et al.*

BY 

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